

## CHECKLIST ENVIRONMENTAL ASSESMENT

**Proposed Action:** Approve Drilling Permit (Form 22)

**Project/Well Name:** Trower 31-27

**Operator:** Jake Oil, LLC

**Location:** NE NW Section 27 T33N R48E

**County:** Daniels **MT;** **Field (or Wildcat):** Wildcat

**Proposed Project Date:** 10/15/2019

### I. DESCRIPTION OF ACTION

Jake Oil, LLC plans to drill a vertical pilot hole to test formations down to the Red River/Winnipegosis/Nisku/Madison formations, 7,310' TMD / 6,600' TVD. Surface casing to be set at 800' and cemented back to surface. Otherwise well will be plugged back to kick off point and will drill horizontally in the Mission Canyon zone.

### II. PROJECT DEVELOPMENT

#### 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED

Montana Bureau of Mines and Geology, GWIC website (Daniels County Wells).

US Fish and Wildlife, Region 6 website

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA COUNTIES, Daniels County

Montana Natural Heritage Program Website (FWP)

Heritage State Rank= S1, S2, S3, T33N R48E

Montana Cadastral Website

Surface Ownership and surface use Section 27 T33N R48E

Montana Department of Natural Resources MEPA Submittal

#### 2. ALTERNATIVES CONSIDERED

No Action Alternative: The proposed well would not be drilled.

Action Alternative: Jake Oil, LLC would have permission to drill the well.

### III. IMPACTS ON THE PHYSICAL ENVIRONMENT

#### 3. AIR QUALITY

Long drilling time: No, 10-15 days drilling time.

Unusually deep drilling (high horsepower rig): No, triple drilling rig to drill a 7,310' TMD / 6,600' TVD well. The objective formations are the Red River/Winnipegosis/Nisku/Madison formations

Possible H<sub>2</sub>S gas production: Yes, possible H<sub>2</sub>S gas from the Mississippian formations.

In/near Class I air quality area: Within boundary of Fort Peck Indian Reservation.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211. AQB review.

Comments: No special concerns – using rig to drill to 7,310' TMD / 6,600' TVD. If there are no gas gathering systems nearby, associated gas can be flared under Board Rule 36.22.1220.

#### 4. WATER QUALITY

Salt/oil based mud: Use freshwater and freshwater mud system for drilling surface hole (Rule 36.22.1001)

The main hole will use a brine mud system.

High water table: No high-water table anticipated at this location.

Surface drainage leads to live water: No, closest drainage is an unnamed ephemeral drainage about 1/5 of a mile to the south. The Poplar River is located about 1.5 miles to the east.

Water well contamination: No water wells within a ½ mile radius.

Porous/permeable soils: Yes, sandy gravel.

Class I stream drainage: No.

Groundwater vulnerability area: No.

Mitigation:

☐ Lined reserve pit

☐ Adequate surface casing

☐ Berms/dykes, re-routed drainage

☒ Closed mud system

☒ Off-site disposal of solids/liquids (in approved facility)

Comments: Steel surface casing will be run and cemented to surface to protect ground water. (Rule 36.22.1001).

#### 5. SOILS/VEGETATION/LAND USE

Vegetation: Grassland.

Stream crossings: None anticipated.

High erosion potential: No, a small cut of 7.1' and a small fill of 6.8' is required.  
Loss of soil productivity: None, location to be restored after drilling well, if well is nonproductive.

Unusually large wellsite (Describe dimensions): No, a large location will be used, 250' X 250'.

Damage to improvements: Slight, surface use is grazing land, near cultivated field.

Conflict with existing land use/values: Slight

Mitigation

- ☐ Avoid improvements (topographic tolerance)
- ☐ Exception location requested
- ☒ Stockpile topsoil
- ☐ Stream Crossing Permit (other agency review)
- ☒ Reclaim unused part of wellsite if productive
- ☐ Special construction methods to enhance reclamation

Access Road: Access will be off Highway 13 and gravel road. A new access of 875' will be built into location.

Drilling fluids/solids: This is a closed loop system. All cuttings will be collected in temporary metal pits to let dry and then will be hauled to a licensed disposal facility.

## **6. HEALTH HAZARDS/NOISE**

Proximity to public facilities/residences: No residences within ½ mile radius. Scobey, MT is located about 14 miles to the north.

Possibility of H2S: Yes, possible H2S gas from the Mississippian formations.

In/near Class I air quality area:

Size of rig/length of drilling time: 10-15 days drilling time.

Mitigation:

- ☒ Proper BOP equipment
- ☐ Topographic sound barriers
- ☐ H2S contingency and/or evacuation plan
- ☐ Special equipment/procedures requirements
- ☐ Other:

## **7. WILDLIFE/RECREATION**

Sage Grouse: NA

Proximity to sensitive wildlife areas (DFWP identified): None.

Proximity to recreation sites: None.

Creation of new access to wildlife habitat: None.

Conflict with game range/refuge management: None.

Threatened or endangered Species: Species identified as threatened or endangered are the Species identified as threatened or endangered are the Whooping Crane, and Piping Plover. MTFWP Natural Heritage Tracker website lists ten (10) species of concern. They are the Eastern Red Bat, Hoary Bat,

Chestnut-collared Longspur, Baird's Sparrow, McCown's Longspur, Northern Redbelly Dace, Iowa Darter, and Northern Pearl Dace.

Mitigation:

☐ Avoidance (topographic tolerance/exception)

☐ Other agency review (DFWP, federal agencies, DNRC Trust Lands, Sage Grouse Habitat Conservation Program)

☐ Screening/fencing of pits, drillsite

☐ Other:

Comments: Private cultivated surface lands. There may be species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands. No concerns.

#### IV. IMPACTS ON THE HUMAN POPULATION

##### 8. HISTORICAL/CULTURAL/PALEONTOLOGICAL

Proximity to known sites: None.

Mitigation

☐ avoidance (topographic tolerance, location exception)

☐ other agency review (SHPO, DNRC Trust Lands, federal agencies)

Other:

##### 9. SOCIAL/ECONOMIC

Substantial effect on tax base

☐ Create demand for new governmental services

☐ Population increase or relocation

Comments: No concerns.

#### IV. SUMMARY

No long term impacts expected. Some short term impacts will occur, but can be mitigated.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

**EA Checklist  
Prepared By:**

**Name:** John Gizicki  
**Title:** Compliance Specialist

**Date:** 09/24/19